

Title (en)  
AXLE DEVICE

Title (de)  
ACHSENVORRICHTUNG

Title (fr)  
DISPOSITIF D'ESSIEU

Publication  
**EP 3263371 B1 20180516 (EN)**

Application  
**EP 17177602 A 20170623**

Priority  
JP 2016126518 A 20160627

Abstract (en)

[origin: EP3263371A1] A axle device for a work vehicle, comprising: a wheel drive case (11), a pair of wheel supports (20), and a steering cylinder (30). The wheel drive case (11) has a front coupling portion (15) and rear coupling portion (16) configured to pivot relative to each other about a rolling axis (R), the rolling axis (R) extending along a front-back direction of a vehicle body of the work vehicle, in use, and further configured to be arranged at a center portion (11 a) of the wheel drive case (11) with respect to a lateral direction of the vehicle body, in use; and an input shaft (12) configured to transmit rotational power to a pair of right-left wheels of the work vehicle. The center portion (11 a) includes a front portion (11f) and a rear portion (11r), either one of the front portion (11f) and rear portion (11 r) is provided with the input shaft (12), and the front coupling portion (15) and rear coupling portion (16) protrude above the input shaft (12), with respect to a vertical direction in use, from the front portion (11f) and the rear portion (11 r), respectively. The pair of wheel supports (20) is arranged on each outer end of the wheel drive case (11) with respect to the lateral direction of the vehicle body and configured to support a pair of wheels for steering and pivoting. The steering cylinder (30) is configured to steer the pair of wheel supports (20), the steering cylinder (30) being supported by the wheel drive case (11) to be located below one of the front and rear coupling portions (15, 16) which is not provided with the input shaft (12), and within a width of the center portion (11 a) of the wheel drive case (11) with respect to the vertical direction, in use.

IPC 8 full level  
**B60G 9/02** (2006.01); **B60B 35/16** (2006.01); **B60K 17/22** (2006.01); **B62D 7/00** (2006.01)

CPC (source: EP US)  
**A01B 69/007** (2013.01 - US); **B60B 35/003** (2013.01 - EP US); **B60B 35/16** (2013.01 - EP US); **B60G 9/02** (2013.01 - EP US); **B60K 17/22** (2013.01 - EP US); **B62D 7/08** (2013.01 - EP US); **B62D 7/163** (2013.01 - US); **B62D 7/18** (2013.01 - EP US); **B60G 2200/322** (2013.01 - EP US); **B60G 2200/422** (2013.01 - EP US); **B60G 2200/44** (2013.01 - EP US); **B60G 2206/31** (2013.01 - EP US); **B60G 2206/32** (2013.01 - EP US); **B60G 2206/8101** (2013.01 - EP US); **B62D 7/16** (2013.01 - US); **B62D 49/00** (2013.01 - US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3263371 A1 20180103**; **EP 3263371 B1 20180516**; CN 107539363 A 20180105; CN 107539363 B 20190712; JP 2018001778 A 20180111; JP 6754630 B2 20200916; US 10703409 B2 20200707; US 2017369097 A1 20171228

DOCDB simple family (application)  
**EP 17177602 A 20170623**; CN 201710442939 A 20170613; JP 2016126518 A 20160627; US 201715619954 A 20170612